

K031389 1 of 1

OCT - 1 2003

### 510(K) Summary

Submitter: Cynosure, Inc.  
10 Elizabeth Drive  
Chelmsford, MA 01824

Contact: George Cho  
Senior Vice President of Medical Technology

Date Summary Prepared: May 1, 2003

Device Trade Name: Smart 2940D Laser

Common Name: Medical Laser System

Classification Name: Instrument, surgical, powered, laser  
79-GEX  
21 CFR 878.48

Equivalent Device: Fotona Fidelis & American Dental Technologies Pulsemaster Er:YAG

Device Description: Smart 2940D is a Er:YAG laser, having a Er:YAG crystal rod as the lasing medium. It is a laser with a wavelength of 2,940 nm.  
  
Laser activation is by footswitch. Overall weight of the laser is 47 Kg, and the size is 145x23x65 cm (HxWxD).  
  
Electrical requirement is 230 VAC, 15A, 50-60 Hz, single phase.

Intended Use: The Smart 2940D is indicated for ablation, incision, excision, coagulation and vaporization of intraoral hard and soft tissue.

Comparison: The Smart 2940D laser has an equivalent indication for uses, the same principle of operation, the same wavelength and essentially the same pulse energy range as the predicate devices.

Nonclinical Performance Data: none

Clinical Performance Data: none

Conclusion: The Smart 2940D laser is another safe and effective device for intraoral hard and soft tissue applications.

Additional Information: none



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

OCT - 1 2003

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Mr. George Cho  
Senior Vice President of Medical Technology  
Cynosure, Inc.  
10 Elizabeth Drive  
Chelmsford, Massachusetts 01824

Re: K031389

Trade/Device Name: Smart 2940D Laser

Regulation Number: 21 CFR 878.4810

Regulation Name: Laser surgical instrument for use in general and  
plastic surgery and in dermatology

Regulatory Class: II

Product Code: GEX

Dated: August 15, 2003

Received: August 18, 2003

Dear Mr. Cho:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

Page 2 - Mr. George Cho

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (301) 594-4659. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,

*Miriam C. Provost*

for Celia M. Witten, Ph.D., M.D.

Director

Division of General, Restorative  
and Neurological Devices

Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure

510(k) Number (if known): K031389

Device Name: Cynosure Smart 2940D Laser

Indications For Use:

The Smart 2940D Er:YAG Laser system is indicated to be used for ablation, incision, excision, vaporization and coagulation of hard and soft intraoral tissue.

The procedures include caries removal, cavity preparation and enamel etching.

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NEEDED)

---

Concurrence of CDRH, Office of Device Evaluation (ODE)

---

Muriam C. Provost  
(Division Sign-Off)  
Division of General, Restorative  
and Neurological Devices

510(k) Number K031389

Prescription Use ✓

OR

Over-The-Counter Use \_\_\_\_\_